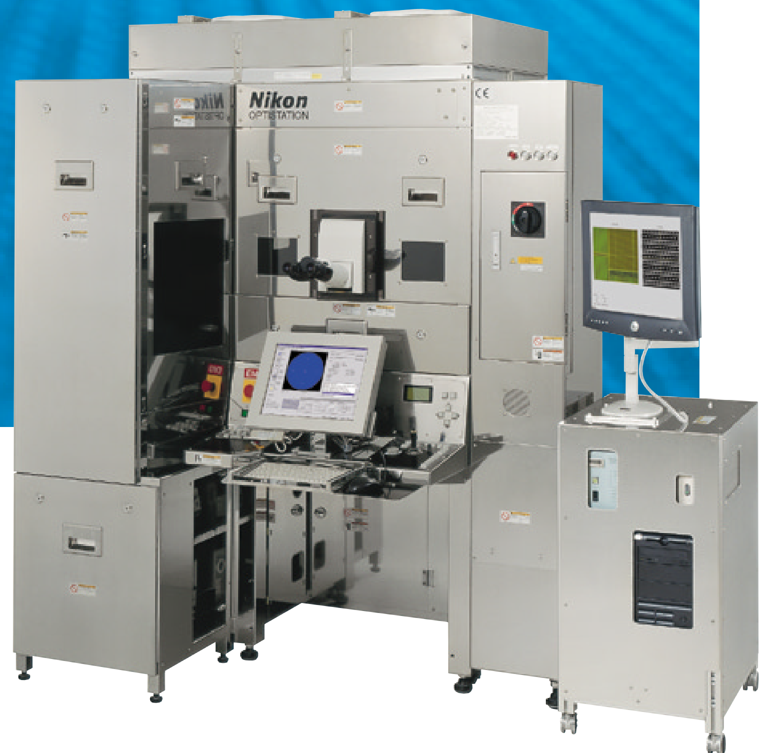
Nikon

Wafer Inspection System

OPTISTATION-3200



Redefining 300mm wafer inspection with Nikon's CFI60 optical design

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Main Features

• New optics

Nikon's renowned CFI60 optics produce crisp, clear images with high contrast and minimal flare. Longer working distances throughout the magnification range ensure safer wafer inspection. The darkfield signal-to-background ratio is three times higher than in the past, ensuring significantly better imaging.

Type	Magnification	N.A.	W.D. (mm)
CFI LU Plan BD	5X	0.15	18.00
	10X	0.30	15.00
	20X	0.45	4.50
	50X	0.80	1.00
	100X	0.90	1.00
CFI LU Plan Apo BD	150X	0.90	0.42

• Newly designed DUV microscope

The newly designed DUV microscope module supports 90nm and future design rules.

• Review inspection with ADC

State-of-the-art image processing and analysis technology ensures accurate defect detection. The user-friendly software allows for easy setup and operation.

• Flexibility in load port positioning

Two load ports are available in the side or rear, making the OPTISTATION-3200 adaptable to diverse fab layouts and 300mm factory automation requirements.

• 3-mode Macro inspection with high-performance illuminators

Allows surface Macro, center backside Macro, and perimeter backside Macro inspections. The newly developed wide (WIL-100) and line (LIL-100) illuminators offer wavelength and lighting techniques to easily detect a variety of process defects.

• Easy operation by touch screen

Automated and motorized functions are controlled by an easily accessible touchscreen to ensure comfortable operation while minimizing contamination. Optimum observation settings, including aperture and light intensity, can be preset according to objective lens or wafer type.

Specifications

Wafer size	ø300mm
Microscope (micro) inspection	
Total magnification	25x to 1,500x
Inspection modes	Brightfield, Darkfield, DIC (option), DUV (option)
Autofocus	LED illumination slit projection
Objectives	CFI60 objectives
Macro inspection	Surface Macro, center backside Macro, perimeter backside Macro
Load port	2 FOUP Position selectable from side or rear
Wafer transfer	Robotic handling; vacuum chuck; noncontact pre-alignment mechanism
Operation	Touch panel GUI, mouse, keyboard
Options	
DUV microscope	Hg-Xe lamp type (248nm)
Online operation	Via SECS-I or HSMS
Others	Video capture function 2nd user interface (UIF) OHV (SEMI E84 compliance) Review inspection ADC OCR
Safety	S2-0302 compliance, CE marking compliance
Ergonomic	S8-0701 compliance
Dimensions (W x D x H) (Rear load port)	1,625 x 2,500 x 2,300mm (64.0 x 98.4 x 90.6 in.)

WARNING TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.

The export of this product is controlled by the Japanese Foreign Exchange and Foreign Trade Law and international export control regime. It should not be exported without authorization from the appropriate governmental authorities.

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. July 2003

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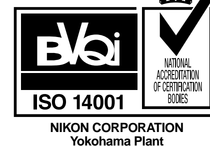

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